WHAT IS CLAIMED IS:

1. A polishing composition for a substrate for memory hard disk comprising water and silica particles, wherein the silica particles have a particle size distribution in which a relationship of a particle size (R) and a cumulative volume frequency (V) in a graph of particle size-cumulative volume frequency obtained by plotting a cumulative volume frequency (%) of the silica particles counted from a small particle size side against a particle size (nm) of the silica particles, the particle size being determined by observation with a transmission electron microscope (TEM), satisfies the following formula (1):

$$V \leq 2 \times (R - 5) \quad (1)$$

in a range of particle sizes of from 5 to 40 nm, and the following formula (2):

$$V \geq 0.5 \times (R - 20) \quad (2)$$

in a range of particle sizes of from 20 to 40 nm, and

wherein a particle size at 90% of a cumulative volume frequency (D90) is within a range of 65 nm or more and less than 105 nm.

2. The polishing composition according to claim 1, wherein the silica particles are colloidal silica particles.

3. The polishing composition according to claim 1, further comprising at least one member selected from the group consisting of acids, salts thereof and oxidizing agents.

4. The polishing composition according to claim 2, further comprising at

least one member selected from the group consisting of acids, salts thereof and oxidizing agents.

5. The polishing composition according to claim 1, further comprising an oxidizing agent and an organic phosphonic acid.

6. The polishing composition according to claim 1, wherein a pH thereof is from 1 to 4.5.

7. A polishing composition for a substrate for memory hard disk comprising an abrasive in an aqueous medium, wherein the abrasive comprises silica particles having particle sizes of from 5 to 120 nm in an amount of 50% by volume or more, wherein the abrasive comprises:

(i) 10 to 70% by volume of small size silica particles having particle sizes of 5 nm or more and less than 40 nm based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm;

(ii) 20 to 70% by volume of intermediate size silica particles having particle sizes of 40 nm or more and less than 80 nm based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm; and

(iii) 0.1 to 40% by volume of large size silica particles having particle sizes of 80 nm or more and 120 nm or less based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm.

8. The polishing composition according to claim 7, wherein the abrasive comprises:

(i) 5 to 70% by volume of particles having particle sizes of from 10 to 30 nm in the small size silica particles based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm;

(ii) 20 to 70% by volume of particles having particle sizes of from 45 to 75 nm in the intermediate size silica particles based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm; and

(iii) 0.1 to 25% by volume of particles having particle sizes of from 90 to 110 nm in the large size silica particles based on an entire amount of the silica particles having particle sizes of from 5 to 120 nm.

9. The polishing composition according to claim 7, wherein the silica particles are colloidal silica particles.

10. The polishing composition according to claim 8, wherein the silica particles are colloidal silica particles.

11. The polishing composition according to claim 7, further comprising at least one member selected from the group consisting of acids, salts thereof and oxidizing agents.

12. The polishing composition according to claim 7, wherein a pH thereof is from 1 to 4.5.

13. A polishing process for a substrate for memory hard disk with suppressed generation of carrier squeals, comprising the step of polishing a substrate for

memory hard disk with the polishing composition of claim 1.

14. A method of reducing micropits of a substrate, comprising the step of applying the polishing composition of claim 7 to a substrate to be polished.

15. A method for manufacturing a substrate for memory hard disk, comprising the step of polishing an Ni-P plated substrate for memory hard disk with the polishing composition of claim 1.

16. A method for manufacturing a substrate for memory hard disk, comprising the step of polishing an Ni-P plated substrate for memory hard disk with the polishing composition of claim 7.

17. An Ni-P plated substrate for memory hard disk obtained by polishing a substrate to be polished with the polishing composition of claim 1.

18. An Ni-P plated substrate for memory hard disk obtained by polishing a substrate to be polished with the polishing composition of claim 7.